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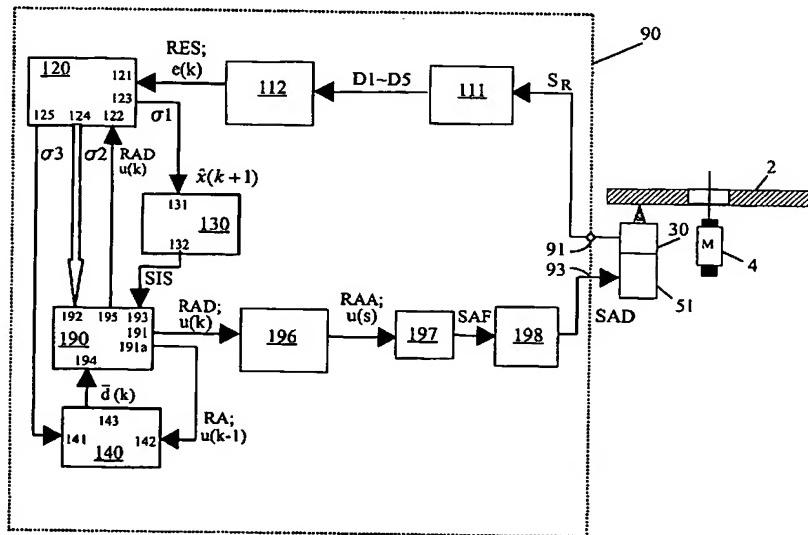
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(54) Title: DISC DRIVE WITH IMPROVED RESISTANCE AGAINST MECHANICAL SHOCKS



(57) Abstract: A disc drive apparatus (1) comprises; a) actuator means (50) for controlling the positioning of an element (34) of a scanning means; b) error signal calculating means (111, 112) for receiving said read signal (SR) and generating at least one error (RES; e(k)); c) a state estimator (120) for receiving said error and for outputting derived signals (s1, s2, s3); d) shock detector means (130) for generating a shock indication signal (SIS); e) actuator control signal generator means (190) designed to perform sliding mode control (SMC), having at least one variable control parameter, for generating an actuator control signal (RAD; u(k)) on the basis of a second one (s2) of said derived signals; f) the actuator control signal generator means setting a first value for said variable control parameter during normal operation, and setting a second value for said variable control parameter when said shock indication signal indicates the occurrence of a shock.

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